

REMARKS

Applicant requests reconsideration and allowance of the present application in view of the foregoing amendments and the following remarks.

Claims 1, 3, 5-16 are pending in the present application. Claims 1, 6, 13, and 16 are the independent claims.

Claims 1, 6, 13, and 16 have been amended. No new matter is believed to have been added.

As a preliminary matter, Applicant wishes to thank the Examiner for his time in conducting an interview on 10 October 2006, in which U.S. Patent No. 5,701,403 was discussed.

Claims 1, 3, and 5-16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,003,498 to Ota et al. in view of U.S. Patent No. 5,701,403 to Watanabe et al. All rejections are respectfully traversed.

Independent claim 1 recites, *inter alia*, "two-dimensional drawing generating means for generating a plurality of orthographic projection views representing a three-dimensional model being defined by performing Boolean operations between a plurality of three-dimensional geometric features, and maintaining a projection view database associating each of the three-dimensional geometric features with a plurality of two-dimensional graphic elements contained in said orthographic projection views".

Independent claim 6 recites, *inter alia*, "generating a plurality of orthographic projection views representing a three-dimensional model defined by performing Boolean operations between a plurality of three-dimensional geometric features, and maintaining a projection view database associating each of the three-dimensional geometric features with a plurality of two-dimensional graphic elements contained in said orthographic projection views".

Independent claim 13 recites, *inter alia*, "entering the orthographic projection view data into an orthographic projection view database associating each of the three-dimensional features with a plurality of two-dimensional graphic elements contained in said orthographic projection views".

Independent claim 16 recites, *inter alia*, "a two-dimensional drawing generating unit which generates a plurality of orthographic projection views representing a three-dimensional model by performing Boolean operations between a plurality of three-dimensional geometric features, and maintaining a projection view database associating each of the three-dimensional

geometric features with a plurality of two-dimensional graphic elements contained in said orthographic projection views".

Without conceding the propriety of the asserted combination, it is respectfully submitted that the asserted citations do not teach or suggest at least the aforementioned features of amended independent claims 1, 6, 13, and 16.

The Office Action acknowledges that "Ota et al. fails to explicitly teach maintaining a projection view database associating graphic elements contained in said generated plurality of orthographic projection views with corresponding 3D geometric features". Instead, the Office Action contends that Watanabe et al. teaches "a CAD system adapted to consider a mutual relationship (association) between figure elements of a 2D drawing and the shape of a 3D product model together with drawing regulations. Said system includes a drawing regulation database 4 for storing data showing a correspondence between drawing regulations and drawing in the CAD system, a product model database 7 for storing data which represents the shape of a product model created by the product modeling building section 3 and a drawing database 9 for storing 2D drawing data produced by the drawing data production section 8." Applicants, however, respectfully disagree.

According to the teachings of Watanabe et al., each graphic element in each 2D projection view (for example, element 505 in FIG. 39) is associated with its corresponding element of a three-dimensional model (for example, element 503 in FIG. 38). Thus, in non-limiting example, when a user specifies a line segment 505 in a projection view, Watanabe et al. teaches that only the corresponding edge 503 of the three-dimensional model will be returned. See Watanabe et al. at col. 42, lines 1-24. The present invention, in contrast would return, for example, 3D object 501 shown in FIG. 38.

Absent from Watanabe et al. is any teaching or suggestion that the projection view database associates each of the three-dimensional geometric features with a plurality of two-dimensional graphic elements contained in the orthographic projection views. Thus, Applicant respectfully submits that Watanabe et al. fails to add anything to the teachings or suggestions of Ota et al. that remedies the aforementioned deficiency.

Accordingly, favorable reconsideration and withdrawal of the rejection of independent claims 1, 6, 13, and 16 under 35 U.S.C. §103 are respectfully requested.

In view of the foregoing, Applicant respectfully submits that the independent claims patentably define the present invention over the citations of record. Further, the dependent claims should also be allowable for the same reasons as their respective base claims and

further due to the additional features that they recite. Separate and individual consideration of the dependent claims is respectfully requested.

Applicant believes that the present Amendment is responsive to each of the points raised by the Examiner in the Official Action. However, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to such matters.

There being no further outstanding objections or rejections, it is submitted that the present application is in condition for allowance. An early action to that effect is courteously solicited.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date:

25 October 2006

By:

Allison Olenginski
Allison Olenginski
Registration No. 55,509

1201 New York Avenue, N.W., 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501